

DESCRIPTION

AMCOM's AM082848SF-4H is a broadband GaN Power Amplifier module designed for general purpose applications. It operates from 0.8GHz to 2.8GHz and typically delivers 60 watts (48dBm) of CW output power and 46dB small signal gain. The amplifier module has 6 screw slots for mounting to a heat sink. This amplifier module is compact and light weight at 7.0" (L) x 4.0" (W) x 0.76" (H).



FEATURES

- Wide bandwidth from 0.8 to 2.8GHz
- Psat 48dBm
- Gain 50dB
- Input / Output matched to 50 Ohms
- TTL control

APPLICATIONS

- Radar
- Communication systems
- Instrumentation and measurements
- Military and Aerospace

TYPICAL PERFORMANCE * (Quiescent bias is +32V, I_{ddq}= 3.5A)

Parameters	Minimum	Typical **	Maximum
Frequency	0.9 – 2.6 GHz	0.8 – 2.8 GHz	
Small Signal Gain	45 dB	50 dB	56 dB
Gain Ripple		± 2 dB	± 4.0 dB
P _{1dB}		42 dBm	
P _{5dB}	45.5 dBm	48 dBm	
Current @ P _{5dB}		5.8A	7A
Noise Figure		-	
IP3		50 dBm	
Input Return Loss		15 dB	
Output Return Loss		10 dB	
TTL RF ON/OFF	<1V for OFF , >2.5 V for ON		
Switching speed		3 µs	6 µs

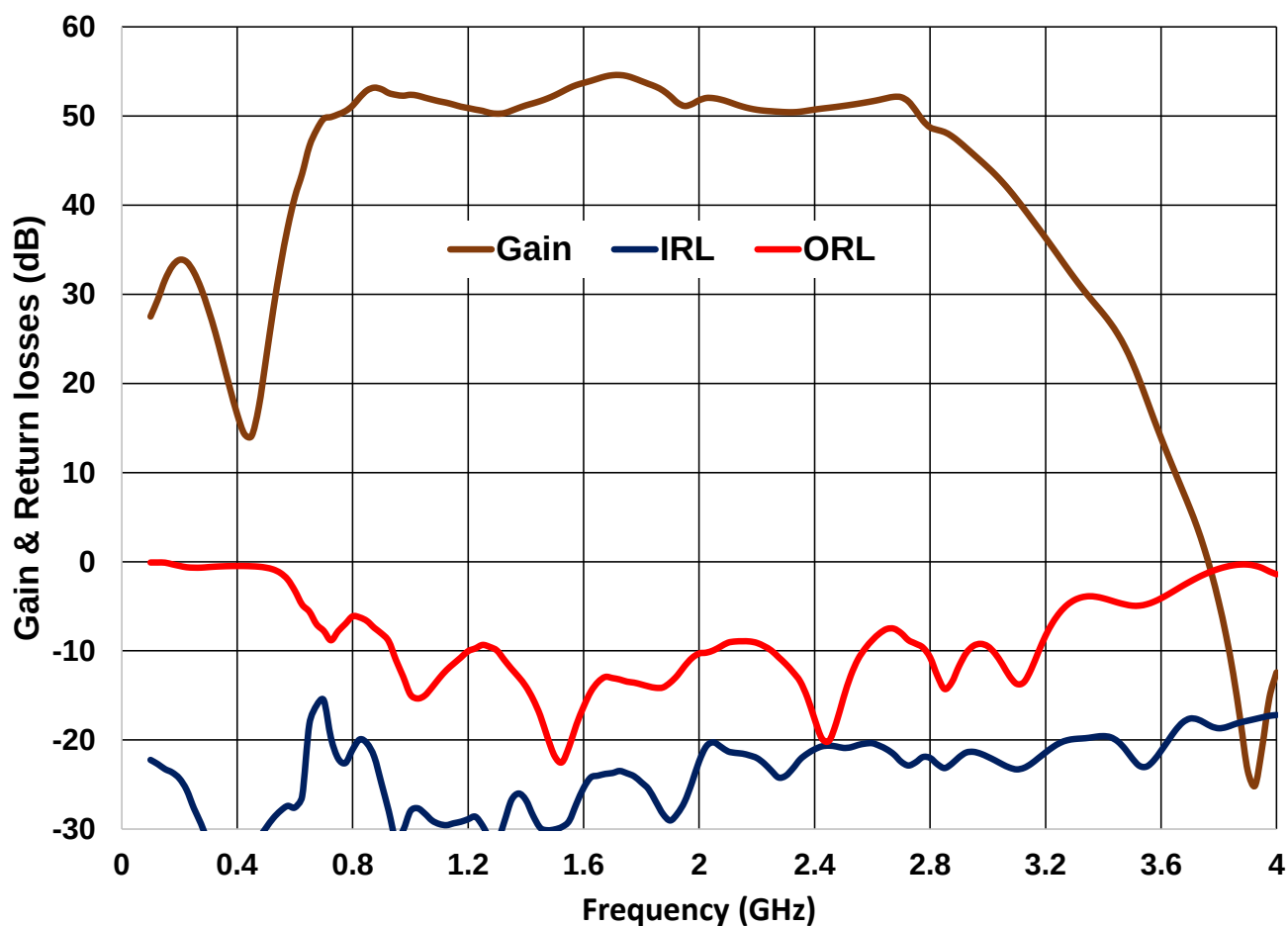
* Notes:

- 1- Specifications are subject to change without notice.
- 2- Proper heat sink should be used to remove heat from bottom of package.

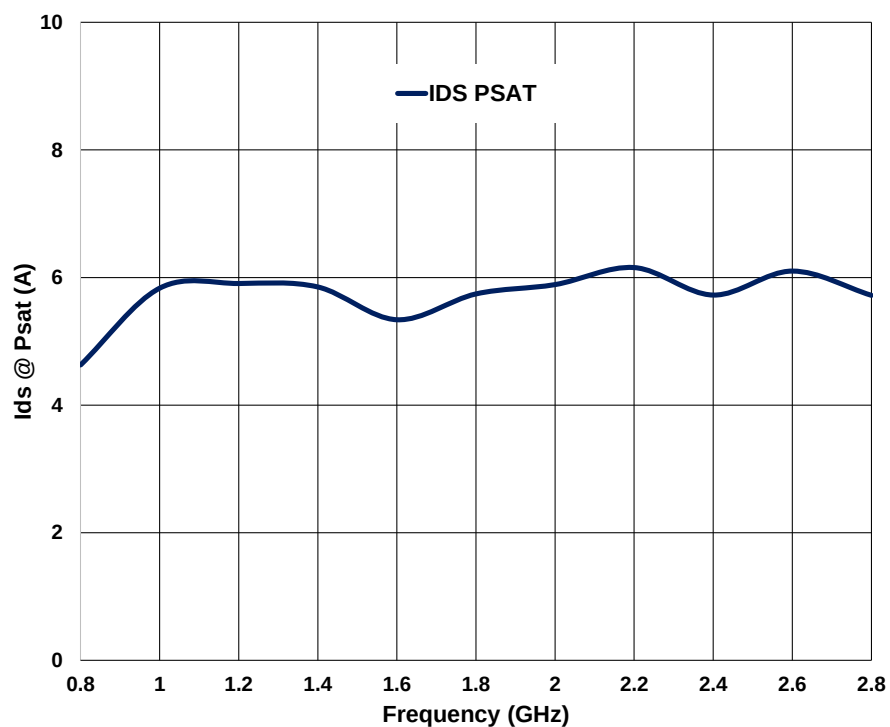
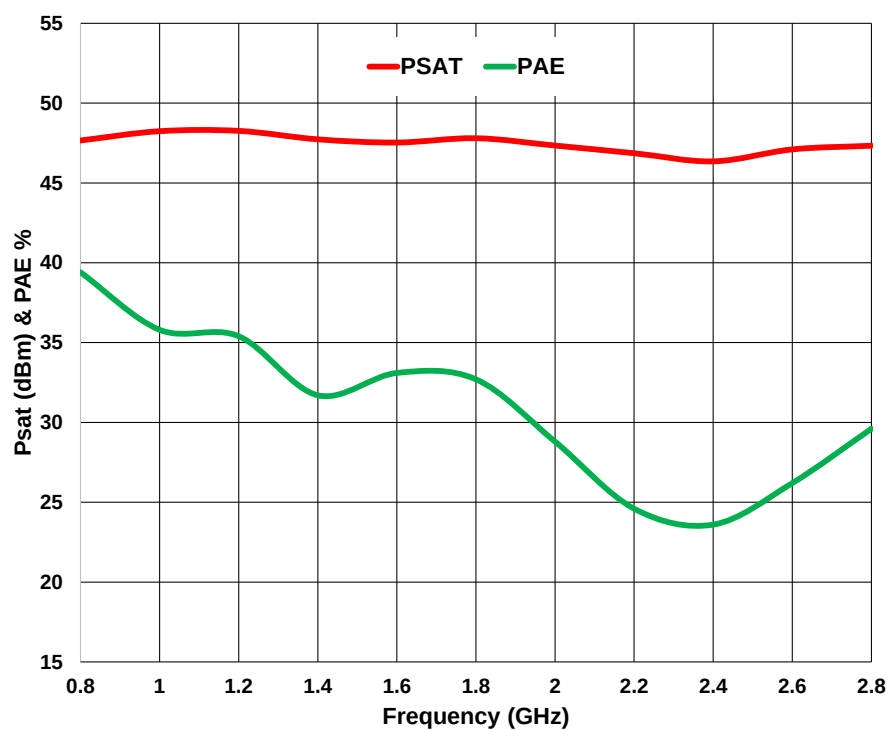
ABSOLUTE MAXIMUM RATING

Parameters	Symbol	Rating
Maximum RF input	$RF_{in\ max}$	+4 dBm
Drain source voltage	V_{dd}	36V
Continuous dissipation at 25°C	P_t	225W
Operating temperature	T_{op}	-40°C to +85°C
Storage temperature	T_{sto}	-55°C to +135°C

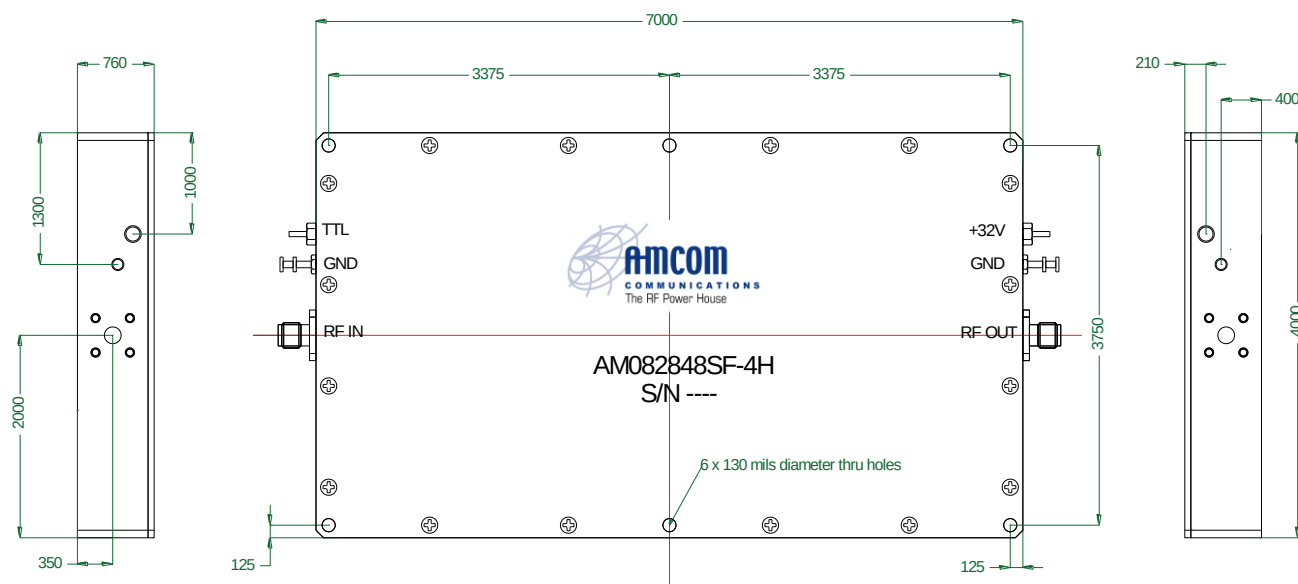
SMALL SIGNAL DATA



POWER DATA



PACKAGE OUTLINE



NOTES:

- 1- Dimensions are in mils.
- 2- Aluminum housing with silver nickel plating.
- 3- Female SMA for RF input and output.
- 4- Use a heat sink to remove heat from the module.